Complete Summary

GUIDELINE TITLE

Cervical cancer screening.

BIBLIOGRAPHIC SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Cervical cancer screening. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Jul. 32 p. [57 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Cervical cancer

GUIDELINE CATEGORY

Counseling
Prevention
Risk Assessment
Screening

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Obstetrics and Gynecology
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Health Plans
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To increase the percentage of women who are up-to-date for cervical cancer screening
- To improve the effectiveness of patient education by taking advantage of regular opportunities to inform women of the need for cervical Papanicolaou (Pap) smear screening

TARGET POPULATION

Sexually active women younger than 18 years of age, and all women aged 18 and older

Note: Women with complaints secondary to the gynecological system lie outside the scope of this guideline.

INTERVENTIONS AND PRACTICES CONSIDERED

1. Education and counseling about cervical cancer screening
2. Papanicolaou (Pap) smears (traditional and Liquid Based Cytology)
3. Patient notification and follow-up

MAJOR OUTCOMES CONSIDERED

- Effect of prescreening educational and counseling activities on percentage of women presenting for cervical Papanicolaou (Pap) smear screening
- Predictive value of Pap smears
- Benefits of Pap smear procedures, techniques, and various screening intervals
- Incidence of cervical cancer at screening intervals of one, two, and three years
- Impact of screening intervals on incidence of morbidity or mortality from cervical dysplasia
- Mortality due to cervical cancer
- Disadvantages and adverse effects of Pap smear screening

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Key conclusions (as determined by the work group) are supported by a conclusion grading worksheet that summarizes the important studies pertaining to the conclusion. Individual studies are classed according to the system presented below, and are designated as positive, negative, or neutral to reflect the study quality.

Conclusion Grades:

Grade I: The evidence consists of results from studies of strong design for answering the question addressed. The results are both clinically important and consistent with minor exceptions at most. The results are free of any significant doubts about generalizability, bias, and flaws in research design. Studies with negative results have sufficiently large samples to have adequate statistical power.

Grade II: The evidence consists of results from studies of strong design for answering the question addressed, but there is some uncertainty attached to the conclusion because of inconsistencies among the results from the studies or because of minor doubts about generalizability, bias, research design flaws, or adequacy of sample size. Alternatively, the evidence consists solely of results from weaker designs for the question addressed, but the results have been confirmed in separate studies and are consistent with minor exceptions at most.

Grade III: The evidence consists of results from studies of strong design for answering the question addressed, but there is substantial uncertainty attached to the conclusion because of inconsistencies among the results of different studies or because of serious doubts about generalizability, bias, design flaws, or adequacy of sample size. Alternatively, the evidence consists solely of results from a limited number of studies of weak design for answering the question addressed.

Grade Not Assignable: There is no evidence available that directly supports or refutes the conclusion.

Study Quality Designations:

The quality of the primary research reports and systematic reviews are designated in the following ways on the conclusion grading worksheets:

Positive: indicates that the report or review has clearly addressed issues of inclusion/exclusion, bias, generalizability, and data collection and analysis.

Negative: indicates that these issues (inclusion/exclusion, bias, generalizability, and data collection and analysis) have not been adequately addressed.

Neutral: indicates that the report or review is neither exceptionally strong nor exceptionally weak.

Not Applicable: indicates that the report is not a primary reference or a systematic review and therefore the quality has not been assessed.

Classes of Research Reports:

A. Primary Reports of New Data Collection:

   Class A:

   - Randomized, controlled trial

   Class B:

   - Cohort study

   Class C:

   - Non-randomized trial with concurrent or historical controls
   - Case-control study
   - Study of sensitivity and specificity of a diagnostic test
   - Population-based descriptive study

   Class D:

   - Cross-sectional study
   - Case series
   - Case report

B. Reports that Synthesize or Reflect upon Collections of Primary Reports

   Class M:

   - Meta-analysis
   - Systematic review
   - Decision analysis
   - Cost-effectiveness analysis

   Class R:

- Consensus statement
- Consensus report
- Narrative review

Class X:

- Medical opinion

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

The guideline developer reviewed published cost analyses.

METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Institute Partners: System-Wide Review

The guideline draft, discussion, and measurement specification documents undergo thorough review. Written comments are solicited from clinical, measurement, and management experts from within the member medical groups during an eight-week period of "Critical Review."

Each of the Institute's participating medical groups determines its own process for distributing the guideline and obtaining feedback. Clinicians are asked to suggest modifications based on their understanding of the clinical literature coupled with their clinical expertise. Representatives from all departments involved in implementation and measurement review the guideline to determine its operational impact. Measurement specifications for selected measures are developed by the Institute for Clinical Systems Improvement (ICSI) in

collaboration with participating medical groups following general implementation of the guideline. The specifications suggest approaches to operationalizing the measure.

Guideline Work Group: Second Draft

Following the completion of the "Critical Review" period, the guideline work group meets 1 to 2 times to review the input received. The original guideline is revised as necessary, and a written response is prepared to address each of the suggestions received from medical groups. Two members of the Preventive Services Steering Committee carefully review the Critical Review input, the work group responses, and the revised draft of the guideline. They report to the entire committee their assessment of two questions: (1) Have the concerns of the medical groups been adequately addressed? (2) Are the medical groups willing and able to implement the guideline? The committee then either approves the guideline for pilot testing as submitted or negotiates changes with the work group representative present at the meeting.

Pilot Test

Medical groups introduce the guideline at pilot sites, providing training to the clinical staff and incorporating it into the organization's scheduling, computer, and other practice systems. Evaluation and assessment occur throughout the pilot test phase, which usually lasts for three months. Comments and suggestions are solicited in the same manner as used during the "Critical Review" phase.

The guideline work group meets to review the pilot sites' experiences and makes the necessary revisions to the guideline, and the Preventive Services Steering Committee reviews the revised guideline and approves it for implementation.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Please note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary. The recommendations that follow are based on the previous version of the guideline.

The recommendations for the cervical cancer screening are presented in the form of 2 algorithms with a total of 32 components, accompanied by detailed annotations. Algorithms are provided for: Cervical Cancer Screening and Severe Inflammation. Clinical Highlights and selected annotations (numbered to correspond with the algorithm) follow.

Class of evidence (A-D, M, R, X) and conclusion grade (I-III, Not Assignable) definitions are repeated at the end of the Major Recommendations field.

Clinical Highlights

1. Screening need not be performed for women who have had a hysterectomy for benign disease. (Annotation #5 - refer to the original guideline document)

2. Initially all women should have annual Papanicolaou (Pap) smear screening beginning at age 18 or within three years of the onset of sexual activity. (Annotation #8)
3. After three consecutive normal Pap smears, and no dysplasia within the last five years, women may have their screening performed less frequently at the discretion of the clinician and patient. (Annotation #21 - refer to the original guideline document)
4. Screening for cervical cancer should be performed at least every three years. (Annotation #23)

Cervical Cancer Screening Algorithm Annotations

1. Prescreening Educational and Counseling Activities

   Employer, School and Community Education Activities

   This group, through this guideline, acknowledges the crucial role played by education and outreach efforts in helping to increase the number of age-appropriate women who present themselves for regular cervical Pap smear screening, thereby reducing the incidence of cervical cancer mortality.

   The following are some ideas for employers, school, and community organizations.

   Awareness initiative programming includes:

   - Posters for company bulletin boards
   - Payroll stuffers with general screening information
   - General screening information "tents" for tables in reception areas, cafeterias, employee lounges, restrooms, locker rooms, and other such places

   Educational initiative programming includes:

   - Articles in employee newsletters, magazines, and/or newspapers
   - Brown-bag lunch seminars, health fairs
   - Direct-mail campaigns with screening information sent to all eligible employees and health plan enrollees

   Behavioral change initiative programming includes:

   - Financial incentive plans, such as employer group programs, which reward enrollees who practice a range of preventive health behaviors including regular cervical Pap smear screening
   - Removal of any time, transportation, or other pragmatic barriers to screening
   - Making a high-level management commitment to cervical cancer screening and other prevention programs

   Information on the importance of regular cervical Pap smear screening can be included as part of broader health promotion/disease prevention initiatives,

which not only include cancer prevention education but also address heart disease and appropriate health care utilization as well. Some employers and health maintenance organizations around the country have also launched successful Women's Health Campaigns, which include cervical cancer screening along with other prominent health issues for women, such as breast cancer detection, smoking, exercise, and so on.

Provider Activities Prescreening Educational and Counseling Activities

Materials such as brochures, posters, "special message" prescription pads, chart reminders, and so on can help support the provider in her/his role as patient counselor/educator. Face-to-face opportunities to encourage women - especially those who haven't had a Pap smear recently or ever - to take advantage of this important and potentially lifesaving procedure are instrumental in improving screening rates, thereby reducing cervical cancer mortality.

Suggested health care provider prescreening activities include:

- Use brochures, posters, and direct-mail materials to recruit women for Pap smear screening.
- Have a process in place to communicate results to patients following Pap smear screening, such as:
    - letter/postcard re: need for repeat Pap smear
    - letter/postcard re: normal Pap smear
    - letter/postcard re: Pap smear findings necessitate repeat Pap smear in six months
    - letter/postcard re: Pap smear findings necessitate further diagnostic follow-up
- Have available materials such as brochures, booklets, or videos regarding findings, disorders, and follow-up diagnostic procedures.
- Have a process in place to remind patients regarding their next appointment for Pap smear screening, including any specific patient instructions.
- Have a process in place to identify women who have not had a Pap smear during the past three years and contact them to encourage them to have a screening. (For patients who have not had a Pap smear in the past three years, simply sending out a letter of invitation to have a Pap smear has not been found to be effective. Other techniques, such as follow-up phone calls or opportunistic screening by providers may be more effective.)
- Have available support and awareness-building opportunities for providers to assist them in the role of patient "recruiter" (e.g., chart reminders, special prescription pads, continuing medical education gatherings).

Evidence supporting this conclusion is of classes: A, C, D, M, R

6. Pap Smear Not Required

Further cytologic examination is not required for women who have undergone a hysterectomy with removal of cervix for benign disease.

7. Out of Guideline

   Women who have had a hysterectomy for carcinoma in situ or invasive cancer should be monitored clinically on at least an annual basis with pelvic exam and Pap smear from the vaginal apex. Immediately following hysterectomy for these indications, a Pap smear should be performed on a more frequent basis.

8. Initiation of Screening: Patient ≥18 Years of Age or Within 3 Years Onset of Sexual Activity?

   Cervical Pap smear screening should be initiated on all women greater than 18 years of age, or within 3 years of the onset of sexual activity. In the asymptomatic patient there is no known benefit to performing a pelvic exam as a screening procedure for gynecological disease.

   Evidence supporting this conclusion is of class: R

10. Cessation of Screening: Patient ≥65 and Has Had 3 Consecutive Normal Paps in the Last 10 Years?

    In women who have had previous adequate screening there is no clear consensus on the need for Pap smears in women over 65 years of age. However, there is still a significant incidence in cervical cancer in this age group in women who have not had previous screening. Pap smears may be performed with mutual consent of patient and provider and should not be performed within less than 2- to 3-year intervals because of the risk of false positives.

    Women over 65 years of age with a minimum of 3 consecutive normal Pap smears in the past 10 years and who are not otherwise at high risk for cervical cancer may cease routine screening. [Conclusion Grade II: See Discussion Appendix A, Conclusion Grading Worksheet – Annotation #10 (Cessation of Screening) in the original guideline document]

12. Does Cervix Appear Normal?

    A normal looking cervix is defined in any standard medical text. The presence of eversion and/or Nabothian cysts does not constitute an abnormality in this context. If a lesion is grossly visible, Pap smear alone does not constitute adequate evaluation; biopsy with or without colposcopy should be done.

13. Out of Guideline/Conduct Further Evaluation and Treatment

    Women requiring further evaluation and treatment as a result of their evaluation fall outside the purview of this guideline.

    Brochures, booklets, teaching displays, and videos are helpful educational tools for those women who need to undergo any follow-up or diagnostic procedures such as colposcopy, loop electrosurgical excision procedure (LEEP), and the like.

14. Obtain Pap Smear

To enhance the likelihood of obtaining cells from the squamocolumnar junction, the following procedure is recommended:

- It would be best if the patient could be instructed not to use a vaginal douche or any type of lubricant for 24 hours before having a Pap smear obtained. However, this should not preclude a patient from receiving a Pap smear.
- Cytological specimens should be obtained with a non-lubricated speculum before a bimanual pelvic examination, if the latter is performed.
- The cervix and that area of the vagina adjacent to the cervix must be fully visible when the smear is obtained.

A. For Traditional Pap Smears
    - The endocervix and ectocervix should be sampled separately (spatula first, cytobrush last).
    - A plastic Ayre spatula, preferably with an extended tip, or a wooden spatula is rotated with pressure over the entire ectocervix.
    - The standard method for sampling the endocervix is with an endocervical brush, which enhances cell recovery. Proper instructions for use of an endocervical brush include:
        - Sample ectocervical region first using ectocervical spatula.
        - Insert brush into the endocervical canal and rotate one half to two full turns.
        - Transfer collected cells by gently rolling and twisting brush against microscope slide, then apply cytology fixative.

      Other devices such as the pointed Ayre spatula also sample the transformation zone. This device is gently inserted into the endocervix and rotated slowly one to two full turns.

    - The material is rapidly applied to a glass slide with a frosted end and spread evenly. The material on the slide must be spread thinly so that microscopic interpretation is possible. Each sample may be placed on a separate glass slide, or alternatively, placed on a single slide.
    - The slide is fixed immediately to prevent drying, either by immersing it in a jar of 95% ethyl alcohol and fixing for 15 minutes, spraying with aerosol or pump fixative while holding the spray can at least 10 to 12 inches from the slide, or flooding with the liquid fixative. Slides fixed in 95% ethyl alcohol can be transported to the laboratory in the alcohol bath or allowed to air dry following fixation. Smears fixed with aerosol or flooding must be air dried before sending to the laboratory.

B. For Liquid Based Cytology (LBC)

- A non-wooden spatula may be used or use other instrument provided.
- The cytobrush should not be rotated more than 180 degrees, and only in one direction.
- These collecting devices are then swished along the inner surface of the fluid container at least 20 times around.

Note: Pap smears should not be performed too soon after delivery. The recommended interval should be 8 or more weeks.

Evidence supporting this conclusion is of classes: C, M, R

16. Is Pap Smear to be Repeated?

The 2001 Bethesda system of nomenclature for Pap smear interpretation (see Annotation #24, "Evaluate Patient Education Needs and Discuss Patient Risk factors/Respond to Patient Questions and Concerns/Notify Patients of Results and Follow-Up Recommendations") includes an evaluative component describing the adequacy of the specimen. This component is further subdivided into two categories:

- satisfactory for evaluation
- unsatisfactory for evaluation

Because this guideline recommends that Pap smear screening may be performed on an every one-to-three-year basis, this work group is also recommending that any Pap smear reported as unsatisfactory for evaluation be repeated within six months.

If reasonable effort to obtain a Pap smear specimen results in continued "absence of endocervical" cells, the Pap smear should be considered normal and need not be repeated more frequently than the standard recommendation. In those patients who are postmenopausal and whose Pap smears are limited by the "absence of endocervical cells," such Pap smears need not be repeated more frequently than the standard recommendation.

Women who are to have their Pap smear repeated due to an inadequate specimen should receive telephone or mail communication explaining the need for the repeat Pap smear within the next twelve months. Pap smears should be repeated >8 weeks from the previous Pap smear.

Evidence supporting this conclusion is of classes: R, X

17. Is Pap Smear negative (No Intraepithelial Neoplasia)?

In order to achieve a more consistent manner of cervical Pap smear reporting, it is highly recommended that all providers and their affiliated laboratories adopt the 2001 Bethesda system of nomenclature for Pap smear interpretation as their system of reporting Pap smear results.

Women whose Pap smear results are normal should receive a mailed communication stating that their Pap smear was normal and stressing the importance of continued regular, periodic cervical Pap smear screening.

Women whose Pap smear results were not normal should receive written communication indicating their results and the need for follow-up via a repeat Pap smear or scheduled diagnostic procedure. Relevant educational materials could accompany this communication.

23. Pap Smear Every 3 Years, as Minimum, or at the Discretion of the Patient and Clinician

After three consecutive normal Pap smears, women may have their screening performed less frequently at the discretion of the patient and clinician. Screening for cervical cancer should be performed as a minimum every three years; it need not be performed for women who have had a hysterectomy for benign disease.

Patients with a history of dysplasia should have annual Pap smears until they no longer have a history of dysplasia within the last five years. At this point they need not be repeated more frequently than the standard recommendation.

Although the standard is three annual normal Pap smears, a wider time frame is acceptable as long as there are no intervening abnormal Pap smear results. This interval time frame should be three normal Pap smears in a period not to exceed five years.

24. Evaluate Patient Education Needs and Discuss Patient Risk Factors/Respond to Patient Questions and Concerns/Notify Patient of Results and Follow-up Recommendations

Women who have many risk factors have a greater need to be screened, but do not need to be screened more frequently as long as their prior Pap smears have been normal. Below is a table of risk factors.

The human immunodeficiency virus (HIV)-positive female has a much higher risk of developing cervical cancer and therefore should be screened annually.

Risk Factors

Relative Risks (Case Control Studies) for Cervical Cancer by Specific Risk Factor:

RR = relative risk

- HIV: RR = very high
- Moderate Dysplasia on Pap smear within past five years: RR = very high
- Intercourse within 1 year of menarche: RR = 26
- Intercourse under age 16 years: RR = 16

- No Prior Screening: RR = 10
- Human papilloma virus (HPV) (depending on subtyping): RR = 2.5 - 30
- Six or more lifetime sexual partners: RR = 5
- Low socioeconomic class: RR = 5
- Race (black vs. white): RR = 2.5
- Smoking: RR = 2
- Oral contraceptive use: RR = 1.2 - 1.5
- Barrier Contraception: RR = 0.6

Note: A relative risk of 1.0 would indicate no increased probability of negative outcome, whereas RR of less than 1.0 means an actual protective effect may be present. RR of 10 means a tenfold increase. Overall risk for reproductive age non-hysterectomized American women to develop cervical cancer is about one in 5,200 per year, or 0.02%.

Patient Communication

Reminder post cards, letters, and telephone calls are integral components of a cervical cancer screening initiative:

- communication tools to inform women of Pap smear results
- explanations of next steps necessary to further diagnose abnormalities
- reminders regarding completing appropriate tests and/or examinations
- routine reminders for periodic Pap smears

Evidence supporting this conclusion is of classes: C, M, R

Severe Inflammation Algorithm Annotations

25. Inflammation Present

Pap smears which are categorized as "unsatisfactory for evaluation" should be repeated within six months.

If a reasonable effort to obtain a Pap smear specimen results in continued "absence of endocervical cells," the Pap smear should be considered normal and need not be repeated more frequently than the standard recommendation. In those patients who are postmenopausal and whose Pap smears are limited by the "absence of endocervical cells," such Pap smears need not be repeated more frequently than the standard recommendation.

Mild inflammation is not considered an abnormal Pap smear result.

Evidence supporting these recommendations is of classes: A, D

28. Evaluate and Treat Infection if Clinically Indicated

There is considerable evidence that persistent inflammatory smears have a 24- to 48% risk of harboring dysplasia, and it is recommended that if an initial Pap smear shows severe inflammation, consideration should be given to treatment and then repeat the Pap smear in 6 months.

Evidence supporting these recommendations is of classes: C, D

29. Repeat Pap Smear Within 3-6 Months

While the scientific literature does not support a specific recommendation for evaluation of abnormal Pap results, the work group suggests a minimum standard that all abnormal Pap tests receive at least one clinical follow-up within 6 months of the identification of abnormal test result. Performing a follow-up in 3 months or less risks finding the same abnormality.

Definitions:

Conclusion Grades:

Grade I: The evidence consists of results from studies of strong design for answering the question addressed. The results are both clinically important and consistent with minor exceptions at most. The results are free of any significant doubts about generalizability, bias, and flaws in research design. Studies with negative results have sufficiently large samples to have adequate statistical power.

Grade II: The evidence consists of results from studies of strong design for answering the question addressed, but there is some uncertainty attached to the conclusion because of inconsistencies among the results from the studies or because of minor doubts about generalizability, bias, research design flaws, or adequacy of sample size. Alternatively, the evidence consists solely of results from weaker designs for the question addressed, but the results have been confirmed in separate studies and are consistent with minor exceptions at most.

Grade III: The evidence consists of results from studies of strong design for answering the question addressed, but there is substantial uncertainty attached to the conclusion because of inconsistencies among the results of different studies or because of serious doubts about generalizability, bias, design flaws, or adequacy of sample size. Alternatively, the evidence consists solely of results from a limited number of studies of weak design for answering the question addressed.

Grade Not Assignable: There is no evidence available that directly supports or refutes the conclusion.

Study Quality Designations:

The quality of the primary research reports and systematic reviews are designated in the following ways on the conclusion grading worksheets:

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Negative: indicates that these issues (inclusion/exclusion, bias, generalizability, and data collection and analysis) have not been adequately addressed.

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Not Applicable: indicates that the report is not a primary reference or a systematic review and therefore the quality has not been assessed.

Classes of Research Reports:

A. Primary Reports of New Data Collection:

Class A:

- Randomized, controlled trial

Class B:

- Cohort study

Class C:

- Non-randomized trial with concurrent or historical controls
- Case-control study
- Study of sensitivity and specificity of a diagnostic test
- Population-based descriptive study

Class D:

- Cross-sectional study
- Case series
- Case report

B. Reports that Synthesize or Reflect upon Collections of Primary Reports

Class M:

- Meta-analysis
- Systematic review
- Decision analysis
- Cost-effectiveness analysis

Class R:

- Consensus statement
- Consensus report
- Narrative review

Class X:

- Medical opinion

CLINICAL ALGORITHM(S)

Two detailed and annotated clinical algorithms are provided for:

- Cervical Cancer Screening
- Severe Inflammation

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The guideline contains an annotated bibliography and discussion of the evidence supporting each recommendation. The type of supporting evidence is classified for selected recommendations (see "Major Recommendations").

In addition, key conclusions contained in the Work Group's algorithm are supported by a grading worksheet that summarizes the important studies pertaining to the conclusion. The type and quality of the evidence supporting these key recommendations is graded for each study.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Appropriate cervical cancer screening techniques and intervals for sexually active women younger than 18 years of age and all women 18 years and older and subsequent potential decrease in the incidence of cervical cancer and morbidity and mortality related to cervical cancer.
- Increased percentage of women presenting for cervical Papanicolaou (Pap) smear screening on a regular basis
- Improved effectiveness of patient education by taking advantage of regular opportunities to inform women of the need for cervical Pap smear screening

Subgroups Most Likely to Benefit

Women at high risk of cervical cancer, especially women who are human immunodeficiency virus (HIV)-positive, women who have had moderate dysplasia on Papanicolaou (Pap) smear within the past five years, women who had intercourse within 1 year of menarche, and women with no prior screening (see "Major Recommendations" for additional risk factors).

POTENTIAL HARMS

Pap smears can result in false-positive and false-negative results.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- These clinical guidelines are designed to assist clinicians by providing an analytical framework for the evaluation and treatment of patients, and are not

intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. A guideline will rarely establish the only approach to a problem.
- This clinical guideline should not be construed as medical advice or medical opinion related to any specific facts or circumstances. Patients are urged to consult a health care professional regarding their own situation and any specific medical questions they may have.
- There is not a consensus in the literature on whether there should be an upper age limit for cervical Papanicolaou (Pap) smear screening.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Once a guideline is approved for general implementation, a medical group can choose to concentrate on the implementation of that guideline. When four or more groups choose the same guideline to implement and they wish to collaborate with others, they may form an action group.

In the action group, each medical group sets specific goals they plan to achieve in improving patient care based on the particular guideline(s). Each medical group shares its experiences and supporting measurement results within the action group. This sharing facilitates a collaborative learning environment. Action group learnings are also documented and shared with interested medical groups within the collaborative.

Currently, action groups may focus on one guideline or a set of guidelines such as hypertension, lipid treatment, and tobacco cessation.

Detailed measurement strategies are presented in the original guideline document to help close the gap between clinical practice and the guideline recommendations. Summaries of the measures are provided in the National Quality Measures Clearinghouse (NQMC).

RELATED NQMC MEASURES

- Cervical cancer screening: percentage of women age 21 through 64 years continuously enrolled during the last twelve months having at least one cervical Pap smear during the past three years.
- Cervical cancer screening: percentage of women age 21 through 64 years seen at least once in the clinic during the past two years who are up-to-date for cervical cancer screening.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Cervical cancer screening. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Jul. 32 p. [57 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1994 Sep (revised 2003 Jul)

GUIDELINE DEVELOPER(S)

Institute for Clinical Systems Improvement - Private Nonprofit Organization

GUIDELINE DEVELOPER COMMENT

Organizations participating in the Institute for Clinical Systems Improvement (ICSI): Affiliated Community Medical Centers, Allina Medical Clinic, Altru Health System, Aspen Medical Group, Avera Health, CentraCare, Columbia Park Medical Group, Community-University Health Care Center, Dakota Clinic, ENT Specialty Care, Fairview Health Services, Family HealthServices Minnesota, Family Practice Medical Center, Gateway Family Health Clinic, Gillette Children's Specialty Healthcare, Grand Itasca Clinic and Hospital, HealthEast Care System, HealthPartners Central Minnesota Clinics, HealthPartners Medical Group and Clinics, Hutchinson Area Health Care, Hutchinson Medical Center, Lakeview Clinic, Mayo Clinic, Mercy Hospital and Health Care Center, MeritCare, Mille Lacs Health System, Minnesota Gastroenterology, Montevideo Clinic, North Clinic, North Memorial Care System, North Suburban Family Physicians, Northwest Family Physicians, Olmsted Medical Center, Park Nicollet Health Services, Pilot City Health Center, Quello Clinic, Ridgeview Medical Center, River Falls Medical Clinic, Saint Mary's/Duluth Clinic Health System, St. Paul Heart Clinic, Sioux Valley Hospitals and Health System, Southside Community Health Services, Stillwater Medical Group, SuperiorHealth Medical Group, University of Minnesota Physicians, Winona Clinic, Ltd., Winona Health

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SOURCE(S) OF FUNDING

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GUIDELINE COMMITTEE

Preventive Services Steering Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Work Group Members: Jeanne M. Anderson, MD (Work Group Leader) (Family HealthServices Minnesota) (Family Practice); Brendon Cullinan, MD (Montevideo Clinic) (Family Practice); Caroline Mason, MD (HealthPartners Medical Group) (Family Practice); Janet Schmitt, MD (Fairview Health Services) (Family Practice); Dale Akkerman, MD (Park Nicollet Health Services) (Ob/Gyn); Brigitte Barrette, MD (Mayo Clinic) (Ob/Gyn); Carol Ball, MD (HealthPartners Medical Group) (Ob/Gyn); Adelaide J. Charlton, NP (Park Nicollet Health Services) (Nursing); Dianne Eggen, MPH (HealthPartners Health Plan) (Health Education); Lisa Harrell (Institute for Clinical Systems Improvement) (Measurement Advisor); Barbara Mullikin, MS (Institute for Clinical Systems Improvement) (Facilitator)

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

In the interest of full disclosure, Institute for Clinical Systems Improvement (ICSI) has adopted the policy of revealing relationships work group members have with companies that sell products or services that are relevant to this guideline topic. The reader should not assume that these financial interests will have an adverse impact on the content of the guideline, but they are noted here to fully inform users. Readers of the guideline may assume that only work group members listed below have potential conflicts of interest to disclose.

No work group members have potential conflicts of interest to disclose.

ICSI's conflict of interest policy and procedures are available for review on ICSI's website at www.icsi.org.

GUIDELINE STATUS

Please note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

GUIDELINE AVAILABILITY

Electronic copies of the updated guideline: Available from the Institute for Clinical Systems Improvement (ICSI) Web site.

Print copies: Available from ICSI, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; telephone, (952) 814-7060; fax, (952) 858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Cervical cancer screening. In: ICSI pocket guidelines. April 2003 edition. Bloomington (MN): Institute for Clinical Systems Improvement, 2003 Mar. p. 18-20.

Print copies: Available from ICSI, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; telephone, (952) 814-7060; fax, (952) 858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on May 5, 1999. The information was verified by the guideline developer on July 6, 1999. This summary was updated by ECRI on May 15, 2000, November 28, 2001, and December 24, 2002. The updated information was verified by the guideline developer on January 23, 2003. This summary was updated again by ECRI on March 31, 2004.

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